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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,837	10/20/2003	Kenshou Miyatake	010482.52834US	2005

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EXAMINER

GOMA, TAWFIK A

ART UNIT

PAPER NUMBER

2627

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,837

Applicant(s)

MIYATAKE, KENSHOU

Examiner

Tawfik Goma

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US 5526336).

Regarding claim 1, Park discloses an optical pickup device for writing data or reading data recorded on an optical disk (fig. 8), said optical pickup device comprising: a laser light source for emitting a laser beam for writing data or reading data (1A, 1B, fig. 8); photodetectors having light-receiving portions for respectively receiving the laser beam reflected by the recording surfaces of a plurality of layers of the optical disk (11A, 11B, fig. 8); and an optical system having a light condensing element for condensing the laser beam emitted from the laser light source onto the recording surfaces of the optical disk (13A, 13B, fig. 8), and a light guide element for selectively guiding the laser beam reflected by the recording surfaces of the optical disk to any of the light-receiving portions (23, fig. 8 and 21, fig. 7); wherein the light condensing element condenses the laser beam emitted from one laser light source onto the recording surfaces of layers of

the optical disk (7', 8', fig. 8), and forms an image at a plurality of focal distances that vary in steps (6, 7', 8', fig. 8), and the surfaces on which images are thereby formed correspond to the recording surfaces of layers of the optical disk (col. 5 lines 43-57); and the light guide element guides reflected light reflected by the recording surfaces of the layers to a plurality of light-receiving portions, so as to simultaneously read or write data to the recording surfaces of the layers (col. 5 lines 33-44).

Regarding claim 2, Park discloses wherein the light condensing element is a hologram for condensing the laser beam emitted from the laser light source and focusing the laser beam on the recording surfaces of the layers of the optical disk (4, fig. 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 5526336) in view of Takeda et al (5648950).

Regarding claim 3, Park discloses an optical pickup device for writing data or reading data recorded on an optical disk (fig. 8), said optical pickup device comprising: a laser light source for emitting a laser beam for writing data or reading data (1A, 1B, fig 8); photodetectors having light-receiving portions for respectively receiving the laser beam reflected by the recording surfaces of a plurality of layers of the optical disk (11A,

11B, fig. 8); and an optical system for guiding to the optical disk the laser beam emitted from the laser light source (22, 23, 4, 5, fig. 8) and guiding to the photodetectors the laser beam reflected by the optical disk (23, fig. 8 and 21, fig. 7); said optical system having: an object lens for condensing the laser beam (5, fig. 8) onto the optical disk, having a curvature or refractive index that varies by steps in the radial direction (5, fig. 8), and comprising a multifocal lens for focusing on a plurality of recording surfaces of the optical disk (4, 5, fig. 8) and a collimator lens (2, fig. 7) for converting transmitted light to parallel light. Park further discloses wherein the object lens condenses the laser beam emitted from one laser light source onto the recording surfaces of the multiple layers of the optical disk (7, 8, fig. 8), so as to simultaneously read or write data to the recording surfaces of the layers (col. 5 lines 33-44). Park fails to disclose wherein the optical system includes a half mirror for reflecting or transmitting a laser beam emitted from the laser light source, and transmitting or reflecting the light reflected from the optical disk and a diffraction grating for diffracting a part of the laser beam penetrated or reflected by the half mirror and guiding the laser beam to any of the light-receiving portions; a collimator lens for converting the light transmitted or reflected into parallel light. In the same field of endeavor, Takeda discloses a rising mirror (13, fig. 15), a diffraction grating (12, 17, fig. 15) for guiding light to different light receiving portions of a photo-detector (fig. 16 and fig. 17). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the optical system disclosed by Park with the features disclosed by Takeda. The rationale is as follows: One of ordinary skill in the art at the time of the applicant's invention

would have been motivated to use a rising mirror and a diffraction grating for directing light to different parts of a photodetector in order to properly detect light that has different polarization used during recording and to reduce the size of the optical system used by Park (see Takeda col. 2 lines 66-67 thru col. 3 lines 1-2)

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 5526336) in view of Hayata (JP 10302403 A).

Regarding claim 4, Park discloses everything claimed as applied above (see claims 1 and 2) Park discloses simultaneous playback of the recording layers (col. 5 lines 33-3) but fails to disclose storage means for saving the data of the other recording surface during playback. In the same field of endeavor, Hayata discloses simultaneously reading data from different layers of a DVD and storage means for storing the read out by the reading means (see abstract, and 13a, 13b fig. 1).

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al (US 5526336) in view of Takeda (US 5648950) and further in view of Hayata (JP 10302403 A).


Regarding claim 4, Park in view of Takeda disclose everything claimed as applied above (see claim 3) Park discloses simultaneous playback of the recording layers (col. 5 lines 33-3) but fails to disclose storage means for saving the data of the other recording surface during playback. In the same field of endeavor, Hayata discloses simultaneously reading data from different layers of a DVD and storage means for storing the read out by the reading means (see abstract, and 13a, 13b fig. 1).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


T. Goma
6/13/2006


THANG V. TRAN
PRIMARY EXAMINER